

I claim:

1. A method of making second generation halftone images lacking visible interference, comprising:

selecting an image which has been halftoned;

5 determining the number of tone levels required for each pixel of the halftoned image;

identifying a halftone cell size;

arranging a dot growth pattern to offset initial dot growth from the center of the halftone cell by defining sub-cells and growing the dot pattern relative to the sub-cell; and
10 growing a dot pattern in a second generation halftone of the selected image.

2. The method of claim 1 which further includes determining a sub-pixel level difference.

15 3. The method of claim 2 wherein said growing includes growing the dot pattern evenly across the second generation image by setting the sub-pixel level difference to one.

4. The method of claim 2 wherein said defining a sub-cell includes defining a cell to be a 4x4 pixel matrix, and defining a sub-cell to be a 2x2 pixel 2D matrix, having a sub-pixel
20 level difference matrix values for each pixel in the cell and sub-cell.

5. The method of claim 4 wherein said arranging includes scaling up the matrix values from zero to one, to zero to 255.

6. The method of claim 1 wherein the number of tone levels is fifteen levels of gray plus white.

7. The method of claim 1 wherein the cell size is 4x4 pixels.

8. A method of making second generation halftone images lacking visible interference, comprising:

selecting an image which has been halftoned;

determining the number of tone levels required for each pixel of the halftoned

5 image;

identifying a halftone cell size;

arranging a dot growth pattern to offset initial dot growth from the center of the halftone cell by defining sub-cells and growing the dot pattern relative to the sub-cell;

determining a sub-pixel level difference; and

10 growing a dot pattern in a second generation halftone of the selected image, including growing the dot pattern evenly across the second generation image by setting the sub-pixel level difference to one.

9. The method of claim 8 wherein the number of tone levels is fifteen levels of gray plus white.

10. The method of claim 8 wherein the cell size is 4x4 pixels.

11. The method of claim 8 wherein said defining a sub-cell includes defining a cell to be a 4x4 pixel matrix, and defining a sub-cell to be a 2x2 pixel 2D matrix, having a sub-pixel level difference matrix values for each pixel in the cell and sub-cell.

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12. The method of claim 11 wherein said arranging includes scaling up the matrix values from zero to one, to zero to 255.